

**Rehabilitation, Recidivism, and the Virtual World**

A Futures Study for Command College

By

Jamie L. Clayton  
Imperial County Sheriff

July, 2011

COMMAND COLLEGE CLASS 49

The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

The views and conclusions expressed in the Command College Futures Project and journal article are those of the author, and are not necessarily those of the CA Commission on Peace Officer Standards and Training (POST).

© Copyright 2010

California Commission on Peace Officer Standards and Training

## **Rehabilitation, Recidivism, and the Virtual World**

### **A Futures Study for Command College**

“1-Sam-21 respond to 2143 W. Elm St. for a possible man-down, fire enroute.” The patrol officers who respond to the scene clear the residence and find John dead. They are not shocked or surprised to find him in an abandoned house. After all, they have known John as a local drunk for the last fifteen years, and have each arrested him at least twenty times for public inebriation. The sad part is, John was only 32 years old, and homeless since the age of 17. Both officers know John lived a hard life, but like many of the homeless population in their city, they assume John chose this life. John had recently been diagnosed with a drug-induced mental disorder, and flagged by social services as non-compliant with his medicine. Although “John” is fictional, his story is not. Fortunately, this recurring story may, in fact, begin to have a happier ending. On the pages that follow, we will take a glimpse into the future of corrections. There, we may see the use of virtual reality to begin the rehabilitation process, and how it can literally change lives like John’s.

#### **The Virtual World and Rehabilitation**

One might ask if using virtual reality for chronic offenders like John is even possible. In fact, it is becoming an increasingly common tool. Let’s first take a look at the virtual world in the medical field. Computer aided technology in the medical field has gone beyond the imaginable. Physicians are now beginning to see the benefit of virtual-reality systems aiding and accelerating the healing process through virtual therapy. According to an MSNBC.com broadcast in 2010 “The system simulates daily activities like taking a walk in an urban

environment, driving a car, hiking up and down a mountain or steering a boat. The scenarios teach patients to stay balanced and react to situations they will face in the real world” (MSNBC.com August 11, 2010 <sup>1</sup>). Some private therapy sessions to treat alcoholism now include the use of virtual helmets. This treatment helps alcoholics address issues and learn how to cope without alcohol. Clients are placed into virtual scenarios depicting parties or social gatherings. The client’s drink of choice is offered in each scene. Through this experience both the clinician and the patient are able to assess addiction levels, work on tools to resist addiction and re-work the scenario until the temptation to drink lessens (dryoutnow.com<sup>2</sup>). Mainstream alcoholic programs have not embraced virtual rehabilitation yet, and treatment statistics to measure success or fail rates are skewed and limited.

This is the frontier of virtual rehabilitation possibilities. Rizzo & Buckwalter, during their studies found “...To some extent it is a pragmatic reality of our ability, or inability, to measure behaviors. Presently the field of neuropsychology has been limited by the technology that is available to objectively evaluate human behavior” (Rizzo & Buckwalter pg. 2<sup>3</sup>). With virtual world rehabilitation, treatment minimized because of technological limitations is no longer a roadblock. These approaches are already paying dividends with our military.

Many of our injured military members suffering from traumatic brain injuries are being treated with virtual reality. Memory loss is often part of the traumatic brain injury diagnosis.

---

<sup>1</sup> MSNBC.com “Virtual Reality Boosts Rehab Efforts” retrieved August 11, 2010

<sup>2</sup> Dryoutnow.com. 2008. *Rehab News: Virtual World Therapeutic For Addicts*. Retrieved August 16, 2010. dryoutnow.com

<sup>3</sup> Rizzo, A. & Buckwalter, J. “Virtual Reality ,Cognitive Assessment and Rehabilitation: The State of the Art” retrieved July 18, 2011

With virtual treatment they can simulate and re-learn daily activities such as; grocery shopping, and balancing a checkbook. Those suffering with attention disorders can be given commands such as; adjust the temperature on the stove or get a red cup from the cupboard. In a virtual session, the patient and physician can assess the significance of injury, ability to respond, and recovery time. Technological advances in rehabilitation are continuing, as are those for personal entertainment.

“Second Life” is a virtual world where the user can create their own virtual life<sup>4</sup>. They can be anyone they desire, have any career, and live where they chose. The gamer can make their avatar any ethnicity or gender, even selecting hair and eye color. In the virtual world, once the avatar is created, it can experience many things; dance clubs, sporting events or a red light district. Sadly, many Second Life users become so engrossed in the avatar they have created, they forego daily activities in their real life to become completely imbedded into their “Second Life”.

Another look at how the virtual world already impacts those in our penal system is the simulated welding program recently introduced by The California Department of Corrections and Rehabilitation (CDCR) some State prisons. According to one inmate who is learning a new craft through the VR trainer, “Once you get the feel down, it feels like you’re really welding, the only difference is you can make mistakes and not waste materials” (Goldsberry, C. pg1<sup>5</sup>). If the advent of technology allows someone to create an imaginary life while relaxing in their living room, and prison systems allow virtual vocational training, why couldn’t corrections merge into

---

<sup>4</sup> Secondlife.com retrieved August 12, 2010

<sup>5</sup> Goldsberry, C. 2008. *California Workforce Development Program Gives Inmates Welding Skills*. Welding Magazine. [www.printthis.clickabilty.com](http://www.printthis.clickabilty.com). retrived July 30, 2010

virtual treatment for offenders? Addiction programs today have little success; recidivism is 69% in California (Fisher, R.<sup>6</sup>), why not explore the possibility?

When virtual world treatment collides with offender treatment, we may actually begin to break the cycle of incarceration and reduce recidivism. What if jail staff and psychological staff were teamed together and addiction issues were addressed at the onset of incarceration?

Currently, the booking process includes a component of medical and mental health pre-screening questions. Addiction assessments are minimal but could include a thorough screening (drug of choice, frequency of use, withdrawal probability, past attempts at being clean & sober, and previous attendance in a program). The most important question would be whether or not the arrestee wanted help to stop his addiction.

#### Virtual World and Corrections

With the integration of virtual therapies, how the offender responds to the addiction assessment questions would determine whether or not he is a candidate for its use. If, at this point someone is determined to be a candidate for virtual treatment, they are segregated and an individualized treatment plan is designed and implemented. A VR system may vary in its specifics, but would incorporate, at minimum, a number of avenues to initiate the rehabilitation process.

Responses to screening and assessment, coupled with current charges, incarceration history and medical information is sent to the mental health staff at the facility. This information is plugged into the virtual world rehabilitation computer and a course of treatment is automatically printed for review. The Psychologist affirms what the computer has determined as

---

<sup>6</sup> Fischer, R. *Are California's Recidivism Rates Really the Highest in the Nation?*. Retrieved August 10, 2010. [www.nicic.gov/library/serial 1951](http://www.nicic.gov/library/serial 1951)

treatment and a personalized rehabilitation plan is initiated. The offender is placed into the computer assigned cell and finds himself in a typical jail cell, but with a monitor on the wall. When the cell door is closed, the monitor comes on and virtual treatment begins. Images of the offender as an avatar explore the virtual world and whatever his issues might be. For those with Post Traumatic Stress Syndrome, the computer takes them back to the incident that caused the Syndrome and forces them to deal with their emotions differently, thus avoiding long-term mental anguish and self medicating. A short vignette showing the potential of VR may help us see its potential.

### Sam

Sam, a heroin addict and Veteran from the Vietnam War is placed into his computer assigned cell and the virtual rehabilitation monitor comes on showing a vivid memory for Sam. He sees himself sitting in the dirt in Vietnam holding his best friend who is bleeding from a shot to his abdomen. Sam turns and runs back to the cell door. He doesn't want to see what happens next; he's lived this scene over and over in his mind for the last thirty years.

The door won't open, the officers won't help him and the scene on the monitor stills until Sam looks at it again. He begrudgingly looks at the monitor again and the scene continues. Sam's friend is bleeding severely and struggling to live. Sam can hear the gunshots and smell the scent of blood and death. Sam covers his face and ears, he doesn't want to see this, doesn't want to remember any of this. The monitor stills the image and waits for Sam. He finally looks at the monitor again and finds himself with his head hung over his friend, crying. Sam is out of his mind, desperate to change the outcome, desperate to save his friend. Raw emotion and grief take over Sam. The monitor stops and the psychologist comes into the cell to talk to Sam about his

natural reactions to an unnatural situation. They discuss an individualized treatment plan and the probability of Sam being placed into multiple virtual therapy sessions, along with counseling.

As the days go by, Sam is nearing the end of his jail sentence. The mental health team create an individualized discharge plan for him including resources in the community to help ensure his progress. Part of the plan and focus is to help Sam recover from his heroin addiction. He is showing great potential for success. His post release team will have continual contact with him and the resources made available to him will augment his recovery.

### It's Not Just Sam

Many offenders have traumatic childhoods or were the victim of constant violence. Many of them have not sought any psychiatric help and they go through their life basing decisions from a survival mode. With virtual therapy, individualized computer generated scenarios can address some of these issues. A methamphetamine addicted prostitute that was repeatedly molested as a child could possibly watch her avatar being raised in a home free of abuse. She would be able to visualize her life without the heartache and pain she was subjected to. She could make decisions based on right and wrong not residual emotional turmoil she suffered as a child.

Not only is the virtual portion of this rehabilitation important, but the aftercare is as well. Programs now offered to offenders often lack available, useful resources in the community. "...treatment effects suggest that neither criminal sanctioning without provision of rehabilitative service nor servicing without reference to clinical principles of rehabilitation will succeed in reducing recidivism. What works, in our view, is the delivery of appropriate correctional service and appropriate service reflects three psychological principles (1) delivery of service to higher risk cases (2) targeting of criminogenic needs and (3) use of styles and modes of treatment



(cognitive and behavioral)” (Bonta, Gendreau, & Cullen<sup>7</sup>). The net result is that chronic offenders (like John) can begin to have hope for their future. As they start to change, we all win. Let’s return to see how John will do in the virtual future.

### John With Virtual World Treatment

We return now to John’s story. This time, virtual rehabilitation is possible. John is a 32 year old white male. He is single, unemployed, homeless, addicted to methamphetamine and alcohol. Two years ago, he was diagnosed with drug induced Schizophrenia. He refuses his medications because of the side effects. He is non-compliant with his Caseworker and Mental Health Services. John has rejected any efforts of assistance and is left to deal with his world, alone. Is he capable of clearly rejecting assistance? He isn’t taking his medications so he acts out and that prevents him from thinking clearly. His Caseworker and Mental Health Services can’t force medications until he is a danger to himself or others. Violence is not his preference, cold beer and meth are. He wasn’t always like this. Was there a time in his many incarcerations the system failed him? Could his current mental health state have been prevented during one of his many incarcerations?

John was born as the third son. His father worked very hard as a laborer, his mother as a bartender. John and his brothers were unplanned pregnancies and brought into an unstable environment. Dad was an angry alcoholic who physically abused mom and all three boys. Mom was a drinker who didn’t do anything to improve her life or that for her sons. One evening when John was about 13 years old, his dad beat his mother so severely they feared she would die. John’s mom never came home from the hospital and left the dad and all three boys to

---

<sup>7</sup> Bonta, J., Gendreau, P., Cullen, F. “Does Correctional Treatment Work?” heinonline.org. retrieved July 18, 2011

themselves. Things didn't get any better for John, they only got worse. His older brothers left the house as soon as they could, leaving John to deal with his sloppy drunk angry father. As high school passed him by, he started experimenting with drugs and alcohol to try to make himself feel better.

Marijuana and alcohol every weekend soon turned into everyday. When there wasn't any money he would steal from wherever possible. Multiple juvenile arrests exacerbated the dad's anger and disgust with John. At the age of 17, John was kicked out of the house. He wandered the streets, stayed with friends until those invitations withered away as well.

John found himself without any vocation, education, ambition or will. He soon resorted to drinking in the park, and panhandling outside the liquor store. Arrest after arrest and the years tick by. John's health begins to deteriorate.

One evening the police are called to arrest John for bothering a patron outside of the liquor store. When Officer Smith approaches John he strikes up a conversation with him and they find mutual respect instead of the provocation that usually surfaces. Incidentally, Smith has just attended training about the virtual world rehabilitation for inmates offered at the county jail. He tells John about the program and convinces John to ask to be considered for services when they get to the jail.

When they arrive to the jail, John is processed by Officer Jones and through the medical screening, mental health and addiction assessment, he asks about the new program. Officer Jones tells John based on his previous arrests and his incarceration history, the computer has determined he could be a potential beneficiary of the program. Officer Jones completes the pre-

screening and John is turned over to the mental health staff. The questions are reviewed and the information is approved by the physician and placed into the virtual world therapy computer system. The computer prints out a course of treatment for John and it is approved by the physician.

John is placed into a pre-determined cell and the monitor in the cell comes to life. He watches with amazement, his life is being played right before his eyes. The monitor then shows John being raised in a home filled with love and free of abuse. The virtual adult John is much different than the John watching the monitor. At the end of the treatment, the physician meets with John and determines a course of treatment, programming and education while he is incarcerated. At the end of his sentence, John is released to the post-release team to begin his new direction in life, sober.

Through this scenario of virtual world rehabilitation, treatment was started and drug induced Schizophrenia was prevented. A clear, precise course of action was individualized to meet John's needs along with the necessary resources to provide a greater chance of success for John. He wasn't lost in the system and wasn't arrested multiple times without any assistance. He wasn't left to wander the streets until his death. His intervention was timely and provided the resources necessary to ensure a better outcome. Not only is John's life immeasurably better, the cost in social and fiscal terms to society is significantly lowered. The dollars saved can then be repurposed for social programs, other services in corrections, or retained and used in a wide variety of ways.

## Conclusion

After becoming more familiar with the virtual world as it is today, it appears that virtual rehabilitation is a reality and treatment for offenders is not that far away. Expenses to incarcerate and the continued debate over addiction as a criminal offense or a disease will expedite this reality.

Although the scenarios submitted in this article seem a little ridiculous and far-fetched today, something similar is in our near future. Soon, technology will be a huge part of incarceration and treatment. Collaborative efforts that include the criminal justice system and mental health professionals will gain popularity. Law enforcement, corrections and medical/mental health professionals will be teamed to combat and prevent tomorrow's users while effectively dealing with today's addicts. Through these efforts intervention with offenders will be more effective at the onset and throughout incarceration. The focus will shift from post release treatment to an ongoing personalized treatment fostering active community resources. The offender's life outside of the facility will be just as important as their life during incarceration.

## References

- Dryoutnow.com. 2008. *Rehab News: Virtual World Therapeutic For Addicts*. Retrieved August 16, 2010. dryoutnow.com
- BontJ. & Gendreau, P., Cullen, F. *Does Correctional Treatment Work?* retrieved July 18, 2011. [www.heinonline.org](http://www.heinonline.org)
- Fischer, R. *Are California's Recidivism Rates Really the Highest in the Nation?*. Retrieved August 10, 2010. www.nicic.gov/library/serial 1951
- Goldsberry, C. 2008. *California Workforce Development Program Gives Inmates Welding Skills*. Welding Magazine. www.printthis.clickabilty.com. retrived July 30, 2010
- MSNBC.com. *Virtual Reality Boosts Rehab Efforts*. Retrieved August 11, 2010. [www.msnbc.msn.com/id/16266245/](http://www.msnbc.msn.com/id/16266245/)
- Rizzo, A. & Buckwalter, J. *Virtual Reality, Cognitive Assessment and Rehabilitation: The State of the Art*. retrieved July 18, 2011. [www.heinonline.org](http://www.heinonline.org)
- [www.SecondLife.com](http://www.SecondLife.com). Accessed on August 12, 2010